

Glacial Ridge National Wildlife Refuge

Hunting Chapter of Visitor Service Plan

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I. Introduction

This Hunting chapter, which is preceding the overall Visitor Service Plan for the Glacial Ridge National Wildlife Refuge, formulates a general concept for hunting opportunities for the entire approved acquisition boundary, and specific plans to address those lands that are officially part of the National Wildlife Refuge System. As additional lands are added to the Glacial Ridge NWR, annual adjustments of areas open for hunting will be made. Within the approved boundary there are 1,696 acres of State Wildlife Management Areas, 560 acres of State Land managed as a Scientific and Natural Area, 345 acres owned by the Red Lake Watershed District, and 1,660 acres owned by The Nature Conservancy managed as a Scientific and Natural Area. Also to consider are township, county, state and federal road right-of-ways, Minnesota Northern railroad right-of-way, Burlington Northern-Sante Fe railroad right-of-way, and several gravel easements.

Glacial Ridge National Wildlife Refuge (Glacial Ridge NWR) is located in Polk County in northwestern Minnesota, approximately 10 miles east of Crookston along U.S. Highway 2. The approved acquisition boundary of 35,750 acres includes approximately 5,000 acres of non-cultivated native prairie. Future habitat restoration potential includes approximately 18,000 acres of prairie and 12,000 acres of wetland. These habitats are important breeding areas for waterfowl, sandhill cranes, shorebirds, greater prairie chicken, many grassland nesting songbirds and a host of mammals.

The catalyst for the restoration of the Glacial Ridge area and the establishment of the Refuge was the partnership of 30 non-profit organizations, universities, government and other agencies. The unique landscape was carved with wind and water over 12,000 years ago from Glacial Lake Agassiz. The formed habitats of prairie grasslands, and a variety of wetlands provided the ingredients for a very diverse continentally important biological community. The Glacial Ridge NWR will be the center point for the restoration of this fragile ecosystem, as less than one percent of native tall-grass prairie remains in Minnesota.

In January 2001, a draft Environmental Assessment (EA) and an Interim Comprehensive Conservation Plan was developed and approved. The EA addressed future management of the proposed refuge which included visitor services. The remnant native prairie areas combined with restored grasslands and wetlands provides an ideal setting for interpretation of the historical and future importance of this once massive ecosystem. Of the six priority public uses (hunting, fishing, wildlife observation, photography, environmental education and interpretation) identified in the 1997 Refuge Improvement Act only fishing does not present itself as a potential public use.

Past hunting opportunities within the proposed refuge boundary have been managed and regulated by the Minnesota Department of Natural Resources. Species hunted in 2004 included: Big game – white-tailed deer, Small Game; cottontail rabbit, jack rabbit, snowshoe hare, gray squirrel, fox squirrels, ruffed grouse, spruce grouse, prairie chicken,

sharp-tailed grouse, Hungarian partridge, pheasant, raccoon, red fox, gray fox, badger, opossum, bobcat, coyote, striped skunk, and Migratory birds; mourning doves, woodcock, sora rails, Virginia rails, common snipe, crows, ducks, geese. Rules and regulations including limits are established by the State of Minnesota and/or the U.S. Fish and Wildlife Service. In 2004, over 25,200 licenses were sold for hunting and fishing related activities in Polk County generating over \$674,000.

Major access to the Glacial Ridge NWR includes U.S. Highway 2, which borders the entire north boundary, Minnesota Highway 32 bisecting the refuge in nearly equal halves east to west, and Polk County Road 45 bisecting the refuge in nearly equal halves north to south. Polk County Road 44 and several township roads provide additional access in and around the refuge. Currently over 40 miles of federal, state, county or township roads either border or bisect the proposed refuge acquisition boundary. Nearly 23,000 acres of the proposed refuge will be within ½ mile of a road, representing nearly 65% of the refuge.

Wildlife observations made by biologists and researchers from the University of Minnesota, USGS and MN-DNR from 1995 through 2004 on the Pembina Trail Preserve include 73 bird species, 35 butterfly species, 11 mammal species, five amphibian species, and five reptile species. The Pembina Trail Preserve is TNC property within the proposed Glacial Ridge NWR acquisition boundary. It is expected that these same number of wildlife species will be found throughout the refuge as lands are acquired and restored. Opportunities for viewing these species will be discussed with the writing of the Visitor Service Plan.

The strategies to provide a quality experience will be closely monitored via hunter contact and as comments are received. It is anticipated that hunting opportunities will need to be modified as lands are added to the Refuge and as hunter numbers increase.

II. Conformance with Statutory Authority

The Glacial Ridge National Wildlife Refuge was created under the legal authority of the Migratory Bird Conservation Act (MBCA), Feb. 18, 1929, 16 U.S.C. 715d and the Emergency Wetland Resources Act of 1986, 16 U.S.C. 3901b. The MBCA created the Migratory Bird Conservation Commission and authorized the acquisition of lands from funds appropriated by Congress, and later, from funds generated by the sale of Federal Duck Stamps. The following is the only language in the Act, or subsequent amendments, pertaining to the types of lands authorized for acquisition:

Sec. 715d. Purchase or rental of approved areas or interests therein; gifts and devises; United States lands. The Secretary of the Interior may -

(2) acquire, by gift or devise, any area or interests therein; which he determines to be suitable for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.

Goals of the Glacial Ridge National Wildlife Refuge: As outlined in the Draft Environmental Assessment and Interim Comprehensive Conservation Plan.

- Strive to maintain diversity and increase abundance of waterfowl and other migratory bird species dependent on prairie wetland and grassland habitats.
- Conserve, manage, and restore the diversity and viability of native fish, wildlife and plant populations associated with tallgrass prairie and prairie wetlands.
- Work in partnership with others to restore or enhance native tallgrass prairie, prairie wetlands and unique plant communities.
- Restore, enhance, and protect water quality and quantity that approaches natural hydrologic functions.
- Provide for compatible wildlife-dependent recreational uses by the public, emphasizing increased public understanding of the northern tallgrass prairie ecosystem and the mission of the National Wildlife Refuge System.

III. Statement of Objectives

The objectives of the Glacial Ridge NWR Hunting plan are:

- Provide the public with safe and enjoyable hunts that are compatible with the Refuge purpose.
- Provide quality hunting opportunities that minimize conflict with other public use activities.
- Provide the public with opportunities to hunt wildlife species that are consistent with the laws and regulations of the State of Minnesota, that don't adversely effect localized wildlife populations, and are consistent with the 1997 National Wildlife Refuge Improvement Act.
- Provide hunting opportunities for persons with disabilities.

IV. Assessment

Currently, wildlife population dynamics are annually evaluated by the State of Minnesota and U.S. Fish and Wildlife Service as part of county, state, national or international wildlife population surveys. Specific surveys completed by the Minnesota Department of Natural Resources personnel include: doe/fetus road kill, August road side, aerial big game, lek/dancing ground, and drumming. These surveys combined with a winter severity index, and biological knowledge of individual species or population model are used to regulate species hunted. Surveys conducted by the U.S. Fish and Wildlife Service to monitor species hunted includes: mourning doves call counts, woodcock singing ground survey, Breeding Waterfowl Population Habitat Survey and Harvest Information Program (HIP).

Specific wildlife surveys that will be conducted to help monitor these changes include; aerial deer counts, mammal spotlight survey, predator scent post survey, waterfowl brood counts, prairie chicken and sharp-tailed dancing ground survey, and small game road-side survey to help monitor these change. Existing surveys conducted by the State of Minnesota and the U.S. Fish and Wildlife Service will continue to be used to evaluate hunting opportunities. Some wildlife populations within the Glacial Ridge NWR boundary are expected to change as wetland and grassland habitats are restored.

V. Description of the Hunting Program

The Glacial Ridge NWR hunting program is designed to provide compatible hunting opportunities, while minimizing conflicts with non-hunting user groups.

Habitat/Wildlife Evaluation

Restoration activities will eventually reflect a mosaic pattern of glacial ridge beach habitats consisting of 12,000 acres of wetlands and 23,000 acres of prairie grasslands. Scattered stands of aspen and willow will form the remaining wildlife habitat. This mosaic pattern will allow for a general distribution of wildlife populations.

Wetlands that will support waterfowl populations, both locally produced and migratory, will be scattered throughout the majority of the refuge. This pattern of wetland distribution will provide areas for quality waterfowl hunting and suitable sanctuary areas.

Areas to be Opened to Hunting

Figure 1, Glacial Ridge NWR Conceptual Hunting Plan, outlines the long range plan for providing visitors with hunting and non-hunting opportunities within the approved acquisition boundary that will be open and/or closed for hunting. Figure 2, 2005 Glacial Ridge NWR Hunt Map, outlines hunting areas for currently owned lands. As additional lands become part of the Glacial Ridge NWR, annual adjustments will be made to ensure compliance with rules and regulations of this plan. When sufficient lands have become part of the Refuge, the Conceptual Hunting Plan will be fully implemented. Hunting opportunities for persons with disabilities will be accommodated through specially designed, accessible blinds within the designated hunting zone. The development of opportunities for persons with disabilities, specifically the number and location of blinds, will become more feasible as additional lands are added to the Refuge.

A. Species to be hunted

Based on current Minnesota Department of Natural Resource justifications for species hunted and harvestable limits, and existence of habitats on the Glacial Ridge NWR that will support specific wildlife species, the following table lists those species that will be open for hunting on the Glacial Ridge NWR. As wildlife surveys are developed and implemented on the Glacial Ridge NWR, adjustments to species hunted will be made.

Table 1 – Wildlife Species Opened for Hunting on Glacial Ridge NWR

Species	General Dates of Hunt
White-tailed Deer Archery General Firearms Muzzle Loader	September - December November November -December
Upland Game Prairie Chicken Sharp-tailed Grouse	October (Only valid with & during Prairie Chicken Season)
Migratory Birds Ducks Goose, Canada Goose, Snow Coots Common Snipe Morning Doves Woodcock Rails	September - November September - December September - December September - November September - November September - October September - November September - November

All applicable State and Federal regulations will be enforced, along with Special Refuge Regulations outlined in Section V11 A.

B. Law Enforcement

Rydell/Glacial Ridge NWR does not have staff with law enforcement authority. The refuge will rely on the Zone Law Enforcement Officers and State Conservation Officers to enforce federal, state and refuge specific laws and rules.

C. Funding

Annual costs will depend on the number of acres that are added yearly to the refuge. Expenses will include boundary posting, other signage, parking lot construction, installation of gates, and hunting brochures, which are estimated at \$10,000 per year. The hunting program will also increase law enforcement patrols, vehicle expense and overtime costs, estimated at \$5,000 per year.

Although wildlife population surveys will be initiated, this documentation would occur with or without a hunting program. These various surveys are estimated to cost \$2,000 annually.

VI. Measures Taken to Avoid Conflicts with Other Management Objectives

A. Biological Conflicts

The endangered western prairie fringed orchid (*Platanthera praeclara*) is the only federal threatened or endangered species known plant that occurs of the refuge. Very little conflict is expected as the orchid blooms in the mid-summer and hunting seasons are in the fall. Some specific areas will be monitored and if increased hunt pressure begins to threaten the orchid bearing fens, additional closures will be established to protect the sites.

Two butterflies, the Dakota skipper (*Hesperia dacotae*), a threatened State species and the regal fritillary (*Speyeria idalia*), a State species of Special Concern are known to occur within the proposed boundary of the refuge. As most hunting opportunities will be limited to foot access only, little impact on habitats for either species is anticipated. Any trail that may be used for access to blinds for persons with disabilities will occur on existing trails/ disturbed sites.

The primary purpose for the establishment of the Glacial Ridge NWR was migratory bird management. During the nesting season access will be controlled to reduce disturbance. The establishment of a non-hunting area and limiting the total acres open to migratory bird hunting to 40% of Refuge Lands will allow for compatibility with the purpose of the Refuge.

B. Public Use Conflicts

As highlighted on the Glacial Ridge NWR Conceptual Hunting Plan map,(See Figure 1), the establishment of a non-hunting zone will provide visitors that don't hunt an area to the enjoy the Refuge. These visitors can enjoy the prairie vista, view the migration of ducks, geese and cranes, and the enjoyment of being out-of-doors. Specific visitor opportunities for wildlife observation, photography, environmental education and interpretation will be addressed in the Visitor Service Plan when written.

Conflicts between hunters are not anticipated. State Wildlife Management Areas and Federal Waterfowl Production Areas within Polk County permitted concurrent hunting of several wildlife species without conflict.

C. Administrative Conflicts

Administrative conflicts with this proposed hunt will coincide with normal issues of establishing a new refuge. As the number of acres increase additional staff will be needed whether a hunting program was implemented or not.

VII. Conduct of the Hunt

A. Refuge-specific Hunting Regulations

Refuge-specific regulations pertaining to the hunt are as follows. Some changes may be warranted after evaluation of the first year's hunt.

- 1) All applicable state and federal regulations apply to all hunts.
- 2) Driving is permitted only on roads designated as open for travel.
- 3) Parking is permitted only in designated parking lots. Parking along road shoulders to access the refuge for any reason is not permitted.
- 4) ATV, snowmobile and other off-road type vehicles are not permitted.
- 5) Retrieval of crippled animals in closed area is permitted only when accompanied by a refuge employee.
- 6) Spotlighting is not permitted at any time or date.
- 7) Only non-toxic shot may be used.
- 8) Only portable tree stands or blinds that are removed at the end of each day are permitted.
- 9) Watercrafts of all kinds are prohibited.
- 10) Target shooting is prohibited.
- 11) Hunting within 100 yards of any hunting blind specifically designed for persons with disabilities while occupied, without a permit, is not prohibited.
- 12) Hunting of unauthorized species is prohibited.

B. Anticipated Public reaction to the Hunt

These hunts might produce some negative reactions from non-hunting refuge visitors during the hunting season. It is hopeful that the establishment of a closed area for the non-hunting visitor will mitigate the majority of conflicts. Visitor complaints will be dealt with on a case by case basis and will provide an opportunity to inform and educate visitors about hunting as a compatible refuge use and management tool.

C. Hunter Application and registration Procedures

Initially no Refuge specific registration or application process will be required. The refuge will be opened to all people with a valid Minnesota Hunting license for the species being hunted. Blind reservation for persons with disabilities will be on a first-come-first serve signup basis, after August 15 of any one year. If wildlife populations' warrant or the number of hunters detract from the quality of the hunt or become a safety issue, the Refuge will develop a permit system to control the hunters allowed at any one time. The potential need of an application

system will be evaluated as the actual size of refuge lands increase or as warranted.

Hunters will be required to comply with rules of the State of Minnesota for registration of game taken.

D. Description of Hunter Selection Process

When a permit system is warranted, it is hopeful that the selection process will be handled through the Minnesota Electronic Licensing System.

E. Media Selection for Announcing and Publicizing the Hunt

The refuge has a standard list of local media contacts for news releases. A news release announcing the hunt will be sent out approximately one month prior to the first hunt. Hunting opportunities will also be printed in the Minnesota Hunting and Trapping Regulations Handbook which is published yearly.

Annual updates and changes to the Glacial Ridge hunting program will be published in the Federal Register.

VIII. References

Bird Monitoring, Division of Migratory Bird Management, U.S. Fish and Wildlife Service, <http://migratorybirds.fws.gov/statsurv/mntrtbl.html>.

Deer density – Spring 2004, Minnesota Department of Natural Resources, <http://www.dnr.state.mn.us/hunting/deer/index.html>.

Minnesota's total deer harvest, Minnesota Department of Natural Resources, <http://www.dnr.state.mn.us/hunting/deer/index.html>.

Minnesota grouse and hare report 2004, Minnesota Department of Natural Resources, <http://www.dnr.state.mn.us/hunting/smallgame/index.html>.

2003 Roadside Count Survey, Minnesota Department of Natural Resources, <http://www.dnr.state.mn.us/hunting/smallgame/index.html>.

2004 prairie chicken hunt information, Minnesota Department of Natural Resources, <http://www.dnr.state.mn.us/hunting/prairiechicken/index.html>.

2004 Minnesota Prairie-Chicken Survey, Minnesota Department of Natural Resources, <http://www.dnr.state.mn.us/hunting/prairiechicken/index.html>.

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<http://hip.fws.gov/>.

Status of Wildlife Populations, Fall 2003. Division of Wildlife, Minnesota Department of Natural Resources. 2003. State of Minnesota.

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